# **TEST REPORT**

# FOR CELLULAR IMAGE AND SPURIOUS REJECTION IN SCANNING RECEIVERS

Equipment Under Test: Scanning Receiver FCC ID: K4431201110

Model name: TS-2000/TS-2000X/TS-B2000

Test for cellular image and spurious rejection in scanning receivers was performed and EUT is compliance with FCC Part 15 section 15.121(b) requirements. While performing the test, FCC "Measurement Procedure for Cellular Image and Spurious Rejection in Scanning Receivers" was used as a guide.

#### Please find attached;

- 1. Configuration information
- 2. Result of the measurements

## 1. Configuration information

#### 1.1 Device(s) information

1	No.	Equipment	Company	Model No.	Serial No.	DoC/FCC ID	Comment
	1	Scanning receiver	KENWOOD	TS-2000X	N/A	K4431201110	=
	2	DC power supply	KENWOOD	PS-52	70600045	N/A	-

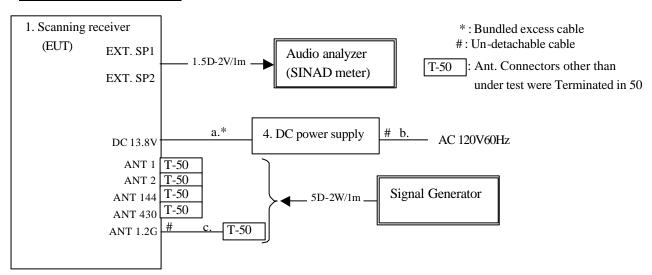
#### 1.2 Cable(s) information

No.	Cable	Length [m]	Shield	Connector	From	То	Comment
a	DC cable	6.0	Unshielded	Plastic	EUT	DC power supply	Accessory
b	AC power cord for DC power supply	1.3	Unshielded	Plastic	DC power supply	AC outlet	-
c	1.2G ANT cable	0.2	Unshielded	Metal	EUT	Terminated in 50	-

#### 1.3 Test equipment used

Equipment	Company	Model No.	Serial No.	Calibration date	Period
Signal generator	Hewlett Packard	8644A	2933A00684	Aug. 2000	1 year
Coaxial cable	FUJIKURA	5D-2W/1m	N/A	N/A	N/A
Coaxial cable	FUJIKURA	1.5D-2V/1m	N/A	N/A	N/A
Audio analyzer	Hewlett Packard	8903B	2836A05685	Aug. 2000	1 year

### 1.4 System configuration



Note: Signal Generator was connected to one of five antenna connector and rest of connectors are terminated in 50 .

#### 2. Results of the measurements

List of the Cellular Test Frequencies:

1.	Mobile bottom	824.5	MHz
2.	" center	836.5	MHz
3.	" top	848.5	MHz
4.	Base bottom	869.5	MHz
5.	" center	881.5	MHz
6.	" top	893.5	MHz

**Result:** We scanned entire tuning range of the receiver at each of Cellular test frequencies above, but the scanner did not stop at any frequency.

Since no "received" frequency to Cellular bands appeared, this scanning receiver is compliance with 38dB rejection requirement in section 15.121(b)

Cellular Test Frequency #1: 824.5MHz

ANT	Scanned freq. range	1. "Received"	2. Image/Spur.	3. Primary
connector		Frequency "D/E"	Sensitivity "H"	Sensitivity "I"
ANT1	30kHz - 60MHz	None		
ANT2	30kHz - 60MHz	None		
ANT144	142MHz - 152MHz	None		
	118MHz - 174MHz			
	220MHz - 300MHz			
ANT430	300MHz - 512MHz	None		
	420MHz - 450MHz			
ANT1.2G	1240MHz - 1300MHz	None		

#### Cellular Test Frequency #2: 836.5MHz

ANT	Scanned freq. range	1. "Received"	2. Image/Spur.	3. Primary
connector		Frequency "D/E"	Sensitivity "H"	Sensitivity "I"
ANT1	30kHz - 60MHz	None		
ANT2	30kHz - 60MHz	None		
ANT144	142MHz - 152MHz	None		
	118MHz - 174MHz			
	220MHz - 300MHz			
ANT430	300MHz - 512MHz	None		
	420MHz - 450MHz			
ANT1.2G	1240MHz - 1300MHz	None		

#### Cellular Test Frequency #3: 848.5MHz

ANT	Scanned freq. range	1. "Received"	2. Image/Spur.	3. Primary
connector		Frequency "D/E"	Sensitivity "H"	Sensitivity "I"
ANT1	30kHz - 60MHz	None		
ANT2	30kHz - 60MHz	None		
ANT144	142MHz - 152MHz	None		
	118MHz - 174MHz			
	220MHz - 512MHz			
ANT430	420MHz - 450MHz	None		
ANT1.2G	1240MHz - 1300MHz	None		

Cellular Test Frequency #4: 869.5MHz

ANT	Scanned freq. range	1. "Received"	2. Image/Spur.	3. Primary
connector		Frequency "D/E"	Sensitivity "H"	Sensitivity "I"
ANT1	30kHz - 60MHz	None		
ANT2	30kHz - 60MHz	None		
ANT144	142MHz - 152MHz	None		
	118MHz - 174MHz			
	220MHz - 300MHz			
ANT430	300MHz - 512MHz	None		
	420MHz - 450MHz			
ANT1.2G	1240MHz - 1300MHz	None		

Cellular Test Frequency #5: 881.5MHz

	Continual restriction for continual						
ANT	Scanned freq. range	1. "Received"	2. Image/Spur.	3. Primary			
connector		Frequency "D/E"	Sensitivity "H"	Sensitivity "I"			
ANT1	30kHz - 60MHz	None					
ANT2	30kHz - 60MHz	None					
ANT144	142MHz - 152MHz	None					
	118MHz - 174MHz						
	220MHz - 300MHz						
ANT430	300MHz - 512MHz	None					
	420MHz - 450MHz						
ANT1.2G	1240MHz - 1300MHz	None					

Cellular Test Frequency #6: 893.5MHz

ANT	Scanned freq. range	1. "Received"	2. Image/Spur.	3. Primary
connector		Frequency "D/E"	Sensitivity "H"	Sensitivity "I"
ANT1	30kHz - 60MHz	None		
ANT2	30kHz - 60MHz	None		
ANT144	142MHz - 152MHz	None		
	118MHz - 174MHz			
	220MHz - 300MHz			
ANT430	300MHz - 512MHz	None		
	420MHz - 450MHz			
ANT1.2G	1240MHz - 1300MHz	None		